ENVIRONMENTAL ASSESSMENT

Interim Park Operations Support Complex Kennecott District

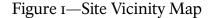
Wrangell-St. Elias National Park and Preserve

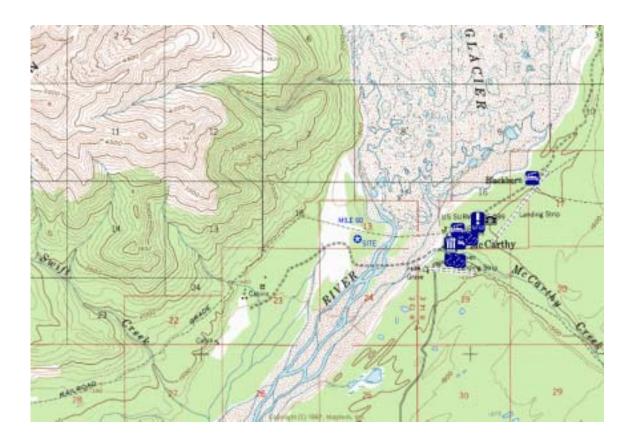
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PURPOSE AND NEED

The National Park Service is proposing development of a temporary park operations support complex in the new Kennecott District of Wrangell-St. Elias National Park and Preserve (WRST) at approximately mile 60 McCarthy Road. The site is west of Kennicott River and the town of McCarthy (see Figure 1, Site Vicinity Map).





This project is envisioned as a field season support camp for NPS employees temporarily stationed for up to five months at the Kennecott Mines National Historic Landmark (NHL) and employees of NPS contractors. Categories of work include specialized maintenance, interpretation, law enforcement, resource management, and visitor protection. Proposed development would include portable housing structures, material staging and storage yard, and utilities including drinking water, septic, and telecommunications. Specific components of the project are as follows (see Figure 2, Site Plan).

- 1000 linear feet new gravel road, 20 feet each side of the centerline (0.9 acre)
- Fenced material storage yard (one acre)
- Well site, water line, and water storage tank (0.2 acre)
- Sewage, leach field, and septic tank (0.9 acre)
- Recreational vehicle (RV) parking pad (3 spaces, total 0.6 acre)

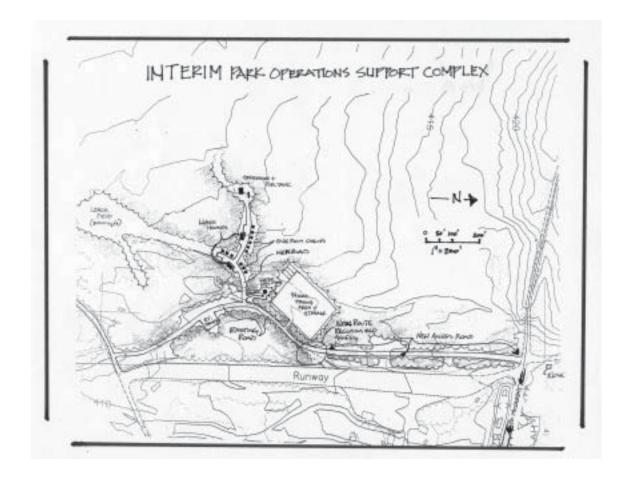
- Cabins, twelve units, each 192 square -feet living space
- Shower, kitchen, laundry support building (two units, each 800 SF)
- Building pads for cabins and support buildings (0.14 acre)
- Generator, generator enclosure and 500-gallon capacity fuel tank (0.02 acre)
- Satellite communications station (0.002 acre or 100 square feet)

The scale of this development would be limited to the extent described in this document pending updating of the WRST general management plan (GMP). Consequently, the development complex may be enlarged, reduced, or decommissioned.

The purpose of the action is to facilitate the emerging demands of managing the Kennecott NHL, a recent NPS addition to the nation's largest unit of the national park system, with associated program demands for park interpretation, cultural resources management, resource protection, visitor protection, and law enforcement. NHL Management is guided by the Kennecott Interim Operations Plan (IOP) issued by the NPS June 2001 (Appendix A). The management goal of the IOP is preserving and interpreting the key patterns and relationships that defined the character of the historic townsite, and stabilizing and interpreting the remaining structures. Issues addressed by the operations plan include park interpretation, building stabilization, artifact treatment, safety and security, utilities and infrastructure, land use and design standards, access and trails, adaptive reuse of buildings, and administration. In regard to administration, the IOP states that housing needs for short-term and long-term seasonal, permanent, and contractor employees would be met by placement of temporary cabins on NPS property, offsite housing, and housing rentals at market rates.

The action would meet the need to have the necessary facilities and infrastructure for housing employees assigned to these program functions. To date, seasonal accommodations for short-term and long-term seasonal and permanent employees, and contractor personnel, has been provided by leasing available properties. However, the need for housing has not been adequately met by leasing available properties. This action would make additional housing available by providing temporary cabins on existing NPS property near McCarthy. Specifically, there are approximately 20-25 local hire employees that support Kennecott District operations. No government housing is needed for these local hire employees. The action is needed as it would provide temporary housing and support for an additional fifteen (15) short-term and long-term seasonal and permanent employees and contractor personnel. NPS would continue to use all available options for housing regardless.

Figure 2—Site Plan



The proposed action would also provide organized and secure space for storage of government supplies and equipment used for park maintenance operations at the NHL. Typically, it takes several months to receive ordered supplies. Consequently, park maintenance personnel have found that the logistics of ordering materials are greatly simplified by planning and ordering supplies well in advance of when they would actually be needed. There is a compelling need for material storage space that is both secure, and located convenient to where the materials would be needed. According to the Alaska Department of Transportation and Public Facilities, it is preferable that the NPS avoid freighting materials over the McCarthy Road during the early spring. During the early spring season, laden trucks are capable of causing the most road damage. Therefore, an additional need for the action is to assist the State of Alaska with maintenance of McCarthy Road.

This environmental assessment (EA) analyzes the proposed action and no-action alternatives and related impacts. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9).

BACKGROUND

In June 1998, the National Park Service acquired the land, mineral rights, and associated holdings of the Kennecott Copper Mines in 2,839 acres located in the center of WRST. This acquisition included property and structures in the historic Kennecott mill town, the center of mining operations from 1901-1938. The Kennecott Mines NHL district encompasses 7,700 acres of public and private lands in the park's Kennecott District. The NHL district contains 45 major residential, commercial, and industrial structures; 25 outbuildings at the mill site; and four major mine sites and associated structures. Historic preservation activities by the National Park Service are proceeding in accordance with the Kennecott Interim Management Plan. In 2002, park management established a new park district and ranger station in Kennecott out of the larger Chitina District given that nearly 60 percent of park visitation occurs in the McCarthy-Kennecott area. Prior to 2002, the nearest ranger station was 60 miles away in the town of Chitina.

Key IOP actions include rehabilitation and adaptive reuse of the company store for administration and visitor contact point; rehabilitation of the National Creek trestle; organizing the mill town into distinct land use areas that reflect historic land use patterns and accommodate contemporary needs; selectively thinning vegetation around historic structures to reduce fire risk and reestablish historic views and vistas; and developing interpretive media and establishing trails to enhance visitor understanding of the site. The primary structures and secondary structures owned by the NPS considered contributing structures that require stabilization and preservation are:

- National Creek trestle
- Concentration mill and tram terminus
- Leaching and flotation plant
- Power plant
- Machine shop
- Store and warehouse
- Manager's office
- National Creek bunkhouse
- West bunkhouse
- Schoolhouse
- Assay office
- Recreation hall
- Depot
- Refrigeration plant

Section 201(9) of the Alaska National Interest Lands Conservation Act states that Wrangell-St. Elias National Park and Preserve would be managed for the following purposes, among others:

"To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall's sheep, moose, wolves, trumpeter swans and other waterfowl, and

marine mammals; to provide continued opportunities, including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of title VIII."

ISSUES CONSIDERED FOR FURTHER EVALUATION

To focus the environmental assessment, the National Park Service selected specific issues for further analysis and eliminated others from evaluation. Subsequent discussions of the affected environment and environmental consequences related to each alternative focus on these issues. The rationale for selecting each topic follows.

Park Administration. There is an existing housing shortage for employees assigned to key park administration functions such as historic preservation, park interpretation, resource management, resource protection, and law enforcement, even with seasonal rentals of existing properties on the local rental market. There is a need for a site that would provide convenient, secure storage of government supplies and equipment versus storing these materials in existing rights-of-way; and that avoids transport of trucks laden with freight during the early spring when the road is most susceptible to road damage.

Visitor Use. The majority of the park's annual visitation occurs in the Kennecott District. Visitor use of the district is projected to increase by nearly 20 percent in 2010 and 50 percent in 2020 relative to 2000 visitation levels. Providing for and properly managing visitor use in the Kennecott District is a high park priority given the area's popularity.

Wildlife. Project construction would have direct effects on wildlife habitat and result in habitat loss. Development of government housing could create bear attractants if resident's food and refuse is not properly secured. Unsecured bear attractants can increase the occurrence of human-bear conflicts, and result in direct and indirect injury and mortality of black and brown (grizzly) bears.

Land Cover. Project development would result in the direct loss of vegetation. Vegetation losses would be permanent for residences, gravel roads, and other surface occupancy.

Cultural Resources. Ground disturbance would occur during construction. Such activity has the potential to impact cultural resources.

Subsistence Resources. The effects of the preferred alternative on subsistence uses and needs are provided in the ANILCA Section 810(a) summary evaluation and analysis found in Appendix 1.

ISSUES ELIMINATED FROM FURTHER CONSIDERATION

ANILCA Section 1306, Administrative Sites and Visitor Facilities. Development and operation of the temporary complex would be on land already owned by the NPS, and

compatible with the purposes of WRST and its recent expansion by the addition of land in the Kennecott NHL. There are no Native lands in the vicinity of the Kennecott District that would provide a site suitable for the proposed development.

Effects on Minority and Low Income Populations. Executive Order 12898 requires federal agencies to incorporate environmental justice into their missions by identifying and addressing high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The development of a park operations support complex would not result in adverse impacts on any minority or low-income population or community.

Visual Resources. The proposed action is not physically situated within the Kennecott NHL and is over 3 miles distant from the town of Kennecott. The proposed complex would be visible from the air, but would not be visible from McCarthy Road. Given the location of the proposed interim park operations support complex, distance from Kennecott, and context within existing development in the town of McCarthy, the proposed action would not detract from the historical scale, integrity, and character of the NHL.

Wilderness. The proposed action is not situated in the Wrangell-St. Elias Wilderness.

Air Quality. Impacts to local air quality, consisting of fugitive dust emissions during construction, are expected to be negligible and of short duration. Local winds occasionally cause entrainment of glacial matter, which obscures visibility on a larger scale. Impacts to air quality associated with the fuel-powered generator would be negligible as this is the only source of power currently available in the McCarthy-Kennecott area for new and existing development, and the proposed action does not constitute any appreciable increase in the area's use of power generators. The generator would run periodically, and air emissions would be negligible.

Water Resources. There are no surface waters at the project site. The project includes septic and leach field. The proposed action would not affect surface waters or groundwater.

Floodplains. The proposed action would not affect floodplains as none exist at the project site.

Wetlands. The proposed action would not affect wetlands as none exist at the project site.

Fisheries. No fish populations exist at the site given that there are no streams or surface waters providing fish habitat.

Threatened, Endangered, and Other Special Status Species of Flora and Fauna. There are no known federal or state listed threatened or endangered species, federal candidate species, or state-listed species of special concern, or critical habitat, at the site of the proposed action. Past consultation with the U.S. Fish and Wildlife Service indicates that the peregrine falcon, an endangered species, could be present in the area. However, project development and use would not result in direct or indirect adverse impacts on this protected species. Therefore this topic was dismissed.

ALTERNATIVES

Site Evaluation Criteria. The following site evaluation criteria were applied in the formulation of alternatives, and in selection of the site proposed for the interim park operations support complex.

Site needs to be west of the Kennicott River. This would facilitate vehicular access and staging of construction materials for transport by truck across the seasonal ice bridge, and avoid freighting of materials during the early spring when laden trucks can cause extensive road damage.

Visual landscape impacts should be minimal. This development should be consistent with similar style buildings and activities to avoid looking out of place.

Social impacts and potential conflicts with park-related activities need to be located away from the core town of McCarthy. This concern recognizes the distinction between NPS workers and their activities and tourist related activities.

Site needs to be 'line of sight' with the Kennecott NHL to receive radio wave communications for satellite connectivity.

Site needs to be geologically stable and have all weather access.

Site should have legally described access, without requiring access across private land. Site should have the potential for security from theft and vandalism. Access to this site should able to be administratively controlled.

Alternative I—No Action. The National Park Service would not develop the Kennecott District interim park operations support complex with access at mile 60 McCarthy Road. The practices of storing materials in existing access rights-of- way and transporting laden trucks during the early spring would continue. The NPS would also lease housing and material storage sites on the open market.

Alternative 2—Develop Kennecott District Interim Park Operations Support Complex (Preferred Alternative). The National Park Service would develop the Kennecott District Park Operations Support Complex. The interim complex would be developed on a 6-acre site on NPS land situated 600 feet south of McCarthy Road with access at mile 60; this site was selected because it was the site that best satisfied the above criteria. This project is envisioned as a field season support facility for NPS employees temporarily stationed at the Kennecott Mines NHL and employees of NPS contractors. Proposed development would include portable housing structures, material staging and storage yard, and utilities including drinking water, septic, and telecommunications. Specific components of the project entail:

- 1000 linear feet new gravel road, 20 feet each side of the centerline (0.9 acre)
- Fenced material storage yard (1.0 acre)
- Well site, water line, and water storage tank (0.2 acre)
- Sewage, leach field, and septic tank (0.9 acre)
- Recreational vehicle (RV) parking pad (3 spaces, total o.6 acre)

- Cabins, twelve units, each 192 square -feet living space
- Shower, kitchen, laundry support building (two units, each 800 SF)
- Building pads for cabins and support buildings (0.14 acre)
- Generator, generator enclosure and 500-gallon capacity fuel tank (0.02 acre)
- Satellite communications station (0.002 acre or 100 square feet)
- Total area of development footprint is approximately 3.75 acres

Site development, planned for summer 2003, entails site clearing and grubbing for the project components; fencing of material staging and storage area; installation of water well and storage tank; installation of leach field and septic system; placement of portable housing structures onsite; and construction of 1,000 feet of new gravel road from mile 60 McCarthy Road (see site plan).

The development would include primitive road development: this would involve clearing and surface grading of approximately 1000 feet and 20 feet each side of the road centerline. The road would join McCarthy road approximately 50 feet west of the north-south section line at mile 60, and extend south to the seasonal camp development.

This project includes two support buildings and twelve cabin units. The support facility building would be approximately 800 SF, and include showers and bathroom, laundry, kitchen/dining, and food storage. Cabins would be up to 192 SF. The typical style would be a simple gable metal roof with wood siding. Interiors would be either sheetrock with paint or wood paneling. Furnishings would typically include a bed, chest of drawers, table, chair and storage shelves.

The material storage and staging area would be used for equipment and supplies needed for the National Park Service historic preservation program, and other aspects of park operations. For security purposes, the storage and staging area would be fenced. As needed, park facility maintenance staff would be able to transport supplies, equipment, and materials directly to the storage and staging area using road vehicles. See the site plan for additional details.

The cabins proposed in this development project are small and portable. They are used in other locations in WRST, and can be relocated to meet local needs from one year to the next. The most significant structures in this development are the support buildings that would be tied to utility services. The capitol expense for these structures and site development would be through ONPS and projects where housing support is needed.

To reduce the availability of unsecured bear attractants, residents of government housing units would not be allowed to store food or refuse outside of the residences. Bear- resistant trash receptacles would be placed for disposal of household refuse.

As mitigation, due to the current level of human-bear conflicts in the McCarthy-Kennecott area, NPS would develop, print, and provide written materials on various aspects of safety in bear country to residents of government housing. These materials would include, but not be limited to bear species identification, summary of human-bear conflicts in the area, how to properly secure bear attractants and dispose of household refuse, potential negative

consequences of unsecured attractants, and a requirement for reporting human-bear conflicts.

In the event this interim development is excess to the governments needs as determined by future planning, the disposition of this site would be established in the course of a future GMP update. Potentially it could be restored to its native condition, or developed in some other way.

ALTERNATIVES CONSIDERED BUT REJECTED

The site selection criteria were applied to development of alternatives for the proposed development. Based on the criteria, the following alternatives were rejected from further consideration.

- I. North of the McCarthy road between the park's information station and the glacier. This site would require extensive road construction in mature spruce forest to avoid private lands. It has greater visibility from the NHL. It is not stable geologically due to sloughing hillside and springs at the base of the hill. This site would be visually inconsistent with the glacial terminus which would be visible from parts of the Kennecott NHL. This site was formerly used for unstructured camping previous to and after establishment of the park and preserve.
- 2. Other site west of the Kennicott River. No specific site was considered because of lack of line of sight connectivity with the NHL, and problems associated with seasonal glaciation of the road which prevents access to the seasonal ice bridge.
- 3. East of the Kennicott River. The site needs to be on the west side of the river to strategically stage materials for seasonal transport across the river. A site in or near the core town of McCarthy could be a social intrusion with the activities

ENVIRONMENTALLY PREFERRED ALTERNATIVE

Alternative 2 was selected as the environmentally preferred alternative. Alternative 2 is the alternative that best promotes the national environmental policy expressed in section 101(b) of the National Environmental Policy Act; the alternative would attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences. While Alternative 1 would avoid direct effects on surface disturbance amounting to 3.75 acres, Alternative 2 better equips park management with more expansive and extensive means and capability to conduct multifaceted functions and programs throughout the Kennecott District with the least probability for indirect harm to park resources, and greater potential for success in achieving the management goal of the Kennecott IOP.

MITIGATION

To reduce the availability of unsecured bear attractants, residents of government housing units would not be allowed to store food or refuse outside of the residences. Bear- resistant

trash receptacles would be placed for disposal of household refuse. Given the current level of human-bear conflicts in the McCarthy-Kennecott area, NPS would develop, print, and provide written materials on various aspects of safety in bear country to residents of

SUMMARY AND COMPARISON OF EFFECTS OF ALTERNATIVES TABLE I—SUMMARY & COMPARISON OF EFFECTS OF ALTERNATIVES Alternative 2—Develop Park Operations Support Alternative I—No Action Complex (Proposed Action and Environmentally Preferred Alternative) Defers achievement of Enables achievement of Kennecott IOP management Kennecott IOP management goal. Rental cost of \$40000 goal. Avoids annual housing PARK ADMINISTRATION for field season housing. rental costs of \$40000 and Housing needs not fully met. meets needs for housing. Unsecured and lack of Secure and strategic material strategic material storage storage Increased park visitation. Increased park visitation. Quality of the park visitation Quality of the park visitation experience would be less experience at high level with VISITOR USE than optimal without adequate support adequate support infrastructure for park infrastructure for park employees and contractors employees and contractors. Direct loss of 3.75 acres of habitat. Negligible adverse impact. Increased human presence onsite; securing of No direct loss of habitat WILDLIFE bear attractants would minimize increased potential for human-bear conflicts and bear mortality No direct loss of land cover Direct loss of 3.75 acres of and no change in species LAND COVER land cover; negligible adverse composition of plant effect communities. No adverse effect **CULTURAL RESOURCES** No adverse effect SUBSISTENCE No significant restriction of No significant restriction of RESOURCES subsistence uses subsistence uses

government housing. These materials would include, but not be limited to bear species identification, summary of human-bear conflicts in the area, how to properly secure bear attractants and dispose of household refuse, potential negative consequences of unsecured attractants, and a requirement for reporting conflicts.

If previously undiscovered cultural resources are encountered during site development, construction activities would be immediately halted and the park superintendent would be The site would be rehabilitated should final planning for a long-term operations facility determine that permanent housing and maintenance facilities to support the long-term management of the Kennecott District should be sited elsewhere. A site rehabilitation plan would be developed to bring the area back to natural conditions if the interim site is no longer needed.

AFFECTED ENVIRONMENT

Park Administration. The park's Kennicott District, formerly within the Chitina District, was designated in 2002. The new district enables park management to better meet the demands of managing the Kennecott NHL, a recent addition to WRST, and increasing visitation to McCarthy and Kennicott. No park employees are stationed in the Kennicott District from October to April. From May through September, the NPS stations permanent and seasonal employees locally to perform key park administration functions including historic preservation, park interpretation, resource management, resource protection, and law enforcement. There are 20-25 local hire employees which already have housing; an additional 15 employees and dependents require housing during the field season.

Currently, government materials and supplies are staged at NPS facilities situated at McCarthy Airport and in Kennecott without complete security. Occasionally, the NPS stores materials in unsecure locations such as along existing access rights-of-way.

The quantity of housing available for rent to the government is insufficient to meet the park's need for a basic operation. This year there is a need to house 15 employees to meet the park's operational requirements. That quantity of housing is not available and the park would be required to adjust its work plan on this basis.

The costs of rentals units are based on anticipated income if the rentals were supporting the tourist market. Housing government employees is a different market category than the tourist market; however the principles of supply and demand prevail in the pricing of rental units. Businesses such as local lodges house their own non-local seasonal workers.

The cost of renting a cottage at Silk Stocking Row, in the NHL is \$3000 per month over a 5 month period, totaling \$15,000. The park is renting two of these cottages in 2003, due to lack of available housing alternatives. Other rented housing costs the NPS \$1300/month for a 5 month period. The daily rate for meals and accommodation is local private lodges can be as much as \$250. In total, annual rental expenses for housing are approximately \$4000 with an acute unmet need for employee housing that curtails NPS management in the Kennecott District.

Visitation. The Kennecott District is the most visited area of WRST. Recent visitation studies showed that more than 50 percent of park visitors go to McCarthy-Kennecott. Visiting McCarthy-Kennecott was the third most popular reason for visiting the park, and walking around the Kennecott mine site was the third most popular visitor activity. The most popular backcountry in WRST is the backcountry surrounding the McCarthy-Kennecott area. Most of the park visitation takes place June-September, and visitors come to the Kennecott District by road or air as indicated below.

Visitation toKennecott District 2000- 2020 Source: State of Alaska, McCarthy Road/Chitina Roundtable Project, April 2000					
Year	Visitor Arriving by Road	Visitors Arriving by Air			
2000	8012	470			
2005	8704	822			
2010	9527	1174			
2015	11098	1526			
2020	11864	1878			

Wildlife. Black and brown (grizzly) bear are common; in the McCarthy/Kennecott area, park data indicate that park visitors were involved in approximately 30 human-bear conflicts during the years 2000 and 2001. There have been numerous cases of bears damaging property and interacting with humans in the McCarthy area in recent years. Due to the abundance of anthropogenic (human) food sources in the Kennicott River valley, bears are habituated to humans and food- conditioned.

A common cause of human-bear conflicts is anthropogenic (human) food; food and food odors associated with the presence of humans are bear attractants. Unsecured attractants can increase the number of human-bear conflicts. A human-bear conflict is defined as any instance where human food, garbage, or other attractants bring bears into close proximity with humans; where bears opportunistically receive food rewards from human encounters; where property is damaged; where bears are killed or wounded; or any encounter where bears display aggressive behavior toward humans.

In summary, current knowledge and research on the dynamics of human-bear conflicts hold that:

- Natural food sources for bears are abundant in the McCarthy/Kennecott area
- Bears are common in the McCarthy/Kennecott area
- ◆ Past human-bear conflicts in the McCarthy/Kennecott area have involved many bears and not just a few "problem" bears
- ♦ High quality food sources and high human presence increase habituation of bears to humans

- Unsecured attractants are a major cause of human-bear conflicts; if not eliminated, unsecured attractants maintain the presence of food- conditioned bears
- Bears habituated to humans and conditioned to anthropogenic (human) foods cause the majority of recorded human injuries arising from human-bear conflicts
- Management actions associated with human-bear conflicts would increase direct and indirect injury and mortality for both black and brown (grizzly) bears

Other wildlife species in the area include birds, snowshoe hare, and voles.

Land Cover. Vegetation surveys of the project site were conducted in July 2002 and June 2000. Based on field observations, the land cover types are balsam poplar woodland and open white spruce forest.

Species present in the balsam poplar woodland are balsam poplar, feltleaf wouldow, diamond-leaf wouldow, soapberry, and dryas. Dandelion is the only non-native species present. The most dominant species in this cover type are poplar, soapberry, and dryas. Less than 50 percent (two of six) of the dominant species in this land cover type are hydrophytic (wetland) plants; therefore there is no positive indicator of wetlands based on vegetation. No federally or state listed plant species were found. The balsam poplar woodland covers a swath of land 200 to 400 feet wide on the project site parallel to the adjacent airstrip on the Adams property.

The remainder of the project site is covered with open white spruce forest. Species present include white spruce, diamond-leaf wouldow, Bebb wouldow, grayleaf wouldow, soapberry, alpine bearberry, northern red- fruit toadflax, and dryas; major dominants are white spruce and soapberry because of cover percentage. Less than 50 percent (three of eight) of the dominant species in this land cover type are hydrophytic (wetland) plants; therefore there is no positive indicator of wetlands based on vegetation. No federally or state listed plant species, or non-native species, were found.



Below: land cover typical of proposed site



Above: aerial view of site of proposed Interim Park Operations Support Complex (view to west)

Cultural Resources. An archaeological survey along the McCarthy Road was conducted by the Alaska Office of History and Archaeology in conjunction with road planning efforts. Significant and insignificant historic resources were identified. Most are associated with the Copper River and Northwestern Railway, and include trestles, railway remains, old homesteads, and artifact scatters. An archaeological survey conducted by park staff in 2002 did not identify the presence of any significant cultural resources at the project site. However, the proposed access road paralleling the airstrip has not been surveyed. Cultural resources within the general vicinity include several features associated with the railway including 2 bridge ruins, an old gravel pit, and a railway "turnaround".

The park has completed the section 106 compliance process in accordance with the 1995 Programmatic Agreement (PA) between the NPS and State Historic Preservation Officer. The NPS is proceeding with the proposed action as it is excluded under the PA. The assessment of actions having an effect on cultural resources is in the appendix.

Subsistence Resources. Local rural residents use wildlife and berries for subsistence purposes. Moose, black bear, snowshoe hare, spruce grouse, and blueberry are harvested for subsistence locally.

ENVIRONMENTAL CONSEQUENCES

Alternative I—No Action

Park Administration. This alternative would constrain park administration. The logistics of material storage essential to park maintenance would be constrained by the lack of designated and secure storage locations. The park's management of material has been hindered by the lack of suitable storage locations without a dedicated secure staging area. There would be a shortage of adequate, inexpensive housing for NPS employees and their dependents during the peak visitation season. Optimal performance of NPS historic preservation, park interpretation, resource management, resource protection, and law

enforcement operations in the Kennecott District could be hindered. Annual employee housing rental costs would be \$40000, and housing needs would not be fully met.

Cumulative Impacts. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human activity and development on federal, state, and private lands in the area would continue to bring residents and visitors alike to McCarthy. Park visitation would continue to increase. Without the interim park operations support complex and improved material storage, achievement of NPS management goal for the NHL may be deferred into the future beyond the life of the IOP. Campground development east of Kennicott River is planned by the NPS that would provide 30 public campsites. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, proposes development of a wayside with parking for cars and recreational vehicles at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non -federal lands in the area is probable. The cumulative effect on park administration with no action would be adverse, but not unmanageable.

<u>Conclusion.</u> Achievement of the Kennecott IOP management goal would be deferred beyond the life of the IOP. The management goal of the IOP is preserving and interpreting the key patterns and relationships that defined the character of the historic townsite, and stabilizing and interpreting the remaining structures.

Park Visitation. Visitation to the Kennecott District is expected to increase through 2020 under each alternative regardless of whether the proposed complex is built. The NPS may experience chronic difficulty staffing seasonal positions and maintaining an onsite presence during peak visitation. The delivery and quality of key programs, such as historic preservation, park interpretation, resource management, resource protection, and law enforcement operations, may be impeded. The perceived quality of the park visitor experience may be less than fully adequate.

<u>Cumulative Impacts</u>. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Park visitation would continue to increase. The cumulative impact on park visitation would be more qualitative than quantitative if the quality of the park visitor experience is less than adequate while visitation continues to increase.

<u>Conclusion</u>. The quality of the park visitation experience may be somewhat diminished with a less than adequate support infrastructure for park employees and contractors.

Wildlife. The park operations support complex would not be built. Consequently, this alternative would prevent the direct loss of 3.75 acres of wildlife habitat; short-term disturbance and avoidance by wildlife; disruption of bird nesting; and changes in animal community species composition. The potential for human-bear conflicts and associated human injury and bear mortality would remain at existing levels with this alternative.

<u>Cumulative Impacts.</u> Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human

activity and development on federal, state, and private lands in the area have directly affected wildlife habitat. Campground development east of Kennicott River is planned by the NPS that would affect one acre of habitat. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, is proposing development of a wayside encompassing 4.4 acres at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non-federal lands in the area is probable. Collectively, future developments in the McCarthy area would cause additional habitat alteration. The cumulative impact on wildlife habitat and populations from ongoing and future actions would be negligible because of the extensive amount of wildlife habitat that exists in the park and preserve. In the McCarthy area, future developments would cause additional habitat alterations and increase the availability of unsecured bear attractants. The potential for human-bear conflicts would increase as would injuries and bear mortality.

<u>Conclusion</u>. There would be no additional loss of wildlife habitat or behavioral disturbance of wildlife without the proposed development. The level of impacts on wildlife anticipated from the no action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Land Cover. The park operations support complex would not be built. Consequently, this alternative would prevent the direct loss of 3.75 acres of land cover consisting of woodland and open spruce forest.

Cumulative Impacts. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human activity and development on federal, state, and private lands in the area have directly affected land cover. Campground development east of Kennicott River is planned by the NPS that would affect one acre of land cover. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, is proposing development of a wayside encompassing 4.4 acres at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non -federal lands in the area is probable. Collectively, future developments in the McCarthy area would cause additional alteration of land cover. Extensive amounts of similar land cover exist elsewhere in the park and much of it is off limits to development as it is situated within the Wrangell-St. Elias Wilderness. The cumulative impact on land cover and plant community composition would be negligible.

<u>Conclusion</u>. There would be no additional loss of land cover without the proposed development. The level of impacts on land cover anticipated from the no action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Cultural Resources. The park operations support complex would not be built. Consequently, there would be no surface disturbance over 3.75 acres possibly containing unknown cultural resources. There would be no effect on cultural resources.

<u>Cumulative Impacts</u>. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Within a regional content, and given the close scrutiny of the effects of surface disturbance and development on cultural resources and mitigation, the cumulative effects on cultural resources are negligible.

<u>Conclusion</u>. There would be no additional loss of cultural resources without the proposed development. The level of impacts on cultural resources anticipated from the no action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Subsistence Resources. The no action alternative would not affect vegetation or wildlife habitat for species used by local rural residents for subsistence purposes (e.g. moose, black bears, snowshoe hares, spruce grouse), the acreage affected would not impact local populations in any significant way. While no berry-bearing bushes would be eliminated, the predominant species are either not used for subsistence purposes (soapberry) or are very common throughout the vicinity (blueberries).

<u>Cumulative Impacts</u>. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Within a regional context, and given the close scrutiny of the effects of federal actions on subsistence, this alternative would not result in a significant restriction of subsistence uses.

<u>Conclusion</u>. There would be no significant restriction of subsistence uses. The level of impacts on subsistence resources anticipated from the no action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Alternative 2—(Proposed Action) Develop Park Operations Support Complex

Park Administration. This alternative would enhance park administration. There would be an adequate supply of inexpensive housing for NPS employees and their dependents during the peak visitation season. Performance of NPS historic preservation, park interpretation, resource management, resource protection, and law enforcement operations in the Kennecott District would be optimized. Park management would realize a cost savings of \$40000 that would otherwise be spent on leasing temporary housing.

Material storage would be centralized in a single, secured location on the west side of the Kennecott River. While it is possible to lease a material staging site from a local developer, the level of control and overall security of stored materials is not as good as a site managed by the park with controlled access. The cost of developing a fenced storage site in this development is the material cost of the fence and minimal clearing. The cost of leasing this service would exceed the government's investment in development of its own yard over a few years. This is a strategic location that provides a place where materials can be freighted

to during the months that the road is open and stable. It provides a location that is convenient to the river for an ice-bridge crossing during the spring, and avoids freighting over unstable road surfaces during the spring.

This project would not resolve material storage needs east of the Kennicott River. After materials are relocated to the Kennecott NHL they must be stored on or near a project location. This project only addresses the strategic need to stage material on the west side of the Kennicott River. There are no possible alternatives that could resolve all of the park's material storage needs in one location.

Adequate housing would be available for NPS employees and their dependents during the peak visitation season. NPS historic preservation, park interpretation, resource management, resource protection, and law enforcement operations in the Kennecott District would be commensurate with the demands of increased visitation. NPS would save \$40000 each year by avoiding expenditures for housing rentals during the field season.

<u>Cumulative Impacts.</u> Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human activity and development on federal, state, and private lands in the area would continue to bring residents and visitors alike to McCarthy. Park visitation would continue to increase. With the interim park operations support complex and improved material storage, achievement of NPS management objectives for the NHL would be met during the life of the IOP. Campground development east of Kennicott River is planned by the NPS that would provide 30 public campsites. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, proposes development of a wayside with parking for cars and recreational vehicles at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non -federal lands in the area is probable. The cumulative effect on park administration with the proposed action would be beneficial with the requisite capability and facilities to manage increasing park visitation.

<u>Conclusion</u>. Achievement of the Kennecott IOP management goal would be met during the life of the IOP. The management goal of the IOP is preserving and interpreting the key patterns and relationships that defined the character of the historic townsite, and stabilizing and interpreting the remaining structures.

Park Visitation. Visitation to the Kennecott District is expected to increase through 2020 under each alternative regardless of whether the proposed complex is built. The NPS would likely not experience chronic difficulty staffing seasonal positions and maintaining an onsite presence during peak visitation. The delivery and quality of key programs, such as historic preservation, park interpretation, resource management, resource protection, and law enforcement operations, would be at the level expected and desired by NPS and park visitors alike. The perceived quality of the park visitor experience would be high.

<u>Cumulative Impacts.</u> Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Park visitation would continue to increase. The cumulative impact on park visitation would be both qualitative and quantitative as the quality of the park visitor experience would be at the level expected.

<u>Conclusion</u>. The quality of the park visitation experience would be maintained at a high level with adequate support infrastructure for park employees and contractors. Park visitation to the Kennecott District would continue to increase.

Wildlife. Surface occupancy for the park operations support complex would directly affect a total of 3.75 acres of wildlife habitat.

Any activity involving construction, including vegetation removal or site preparation, would entail some short-term and spatially limited disturbance to wildlife species inhabiting the site such as birds, red squirrels, snowshoe hares, mice and voles. Mobile species would avoid the area during actual construction activity. In addition it is possible that some bird nesting might be prevented or interrupted. Given the very low nesting densities in these habitats the probability of nest disturbance or destruction is extremely low, and would likely affect the most common nesting species (e.g. robins, juncos).

Changing vegetation structure is likely to result in small and very localized changes in animal community species composition. Specifically, species inhabiting more open habitats would replace cover- dependent species.

The proposed action would increase the presence of humans onsite. There would be increased availability of bear attractants which, if unsecured, would increase the potential for human-bear conflicts, human injury, and bear mortality. However, housing residents would be restricted from storing bear attractants (e.g. dog food) outside, and would be required to use bear- resistant trash containers. These measures would lower the potential for human-bear conflicts.

Cumulative Impacts. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human activity and development on federal, state, and private lands in the area have directly affected wildlife habitat. Campground development east of Kennicott River is planned by the NPS that would affect one acre of habitat. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, is proposing development of a wayside encompassing 4.4 acres at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non -federal lands in the area is probable. Collectively, future developments in the McCarthy area would cause additional habitat alteration. Extensive amounts of similar wildlife habitat exist elsewhere in the park and much of it is off limits to development as it is situated within the Wrangell-St. Elias Wilderness. The cumulative impact on wildlife habitat and populations would be negligible. The availability of unsecured bear attractants in the area may increase. There would be moderate adverse cumulative impacts from injuries or mortalities to bears associated with the management of human-bear conflicts.

<u>Conclusion.</u> Wildlife impacts would be negligible due to the minimal direct loss of habitat. The level of impacts on wildlife anticipated from the proposed action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Land Cover. Surface occupancy for the park operations support complex would directly affect a total of 3.75 acres of woodland and open spruce forest.

Cumulative Impacts. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Past human activity and development on federal, state, and private lands in the area have directly affected land cover. Campground development east of Kennicott River is planned by the NPS that would affect one acre of land cover. The Alaska Department of Transportation and Public Facilities, with Federal Highway Administration cooperation, is proposing development of a wayside encompassing 4.4 acres at the end of McCarthy Road, west of Kennicott River. Additional development of subdivided non -federal lands in the area is probable. Collectively, future developments in the McCarthy area would cause additional alteration of land cover. Extensive amounts of similar land cover exist elsewhere in the park and much of it is off limits to development as it is situated within the Wrangell-St. Elias Wilderness. The cumulative impact on land cover and plant community composition would be negligible.

<u>Conclusion</u>. Land cover impacts would be negligible due to the minimal direct loss of land cover. The level of impacts on land cover anticipated from the proposed action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Cultural Resources. The park operations support complex would be built. Consequently, there would be new surface disturbance on 3.75 acres possibly containing unknown cultural resources. If previously undiscovered cultural resources are encountered during site development, construction activities would be immediately halted and the park superintendent would be notified. The NPS would consult with the State Historic Preservation Officer and take appropriate action to document and protect any discovery of cultural resources.

<u>Cumulative Impacts.</u> Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Within a regional context, and given the close scrutiny of the effects of surface disturbance and development on cultural resources and mitigation, the cumulative effects on cultural resources are negligible.

<u>Conclusion.</u> Impacts on cultural resources would be neglible. The level of impacts on cultural resources anticipated from the proposed action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

Subsistence Resources. The proposed action alternative would directly affect 2.4 acres of land cover and wildlife habitat for species used by local rural residents for subsistence purposes (e.g. moose, black bears, snowshoe hares, spruce grouse). The acreage affected would not impact local populations in any significant way. While some berry-bearing

bushes would be eliminated, the predominant species are either not used for subsistence purposes (soapberry) or are very common throughout the vicinity (blueberries).

<u>Cumulative Impacts</u>. Cumulative impacts arise from the incremental impact of this alternative combined with other past, present, and foreseeable future actions. Within a regional context, and given the close scrutiny of the effects of federal actions on subsistence, this alternative would not result in a significant restriction of subsistence uses.

<u>Conclusion</u>. There would be no significant restriction of subsistence uses. The level of impacts on subsistence resources anticipated from the proposed action alternative would not result in impairment of park resources that fulfill specific purposes identified in the WRST enabling legislation or that are key to the natural and cultural integrity of the park and preserve.

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REFERENCES CITED

Request for Comments dated January 9, 2003, McCarthy Road and Kennicott River Wayside, State of Alaska, Department of Transportation and Public Facilities

Environmental Assessment, McCarthy Airport Walk-in Campground, Wrangell-St. Elias National Park and Preserve, December 2002, National Park Service

Vegetation for the Proposed McCarthy Employee Housing/Material Staging Site, September 9, 2002, Supplement to Proposed McCarthy Campground Sites Vegetation Survey June 29-30, 2000, National Park Service

APPENDICES

A.	Interim	0	perations	Plan.	, Kennecott	NHL

- B. ANILCA Section 810 (a) Summary Evaluation and Finding
- C. Assessment of Actions Having an Effect on Cultural Resources for Interim Park Operations Support Complex
- D. Archaeological Inventory Report Form for Interim Park Operations Support Complex

Appendix A

Interim Operations Plan, Kennecott NHL

The purpose of this Interim Operations Plan for the Kennecott National Historic Landmark (NHL) is to develop management strategies for the National Park Service (NPS) at the NHL in the Wrangell-St. Elias National Park and Preserve. Such a plan became necessary when the National Park Service acquired the privately owned site in June 1998. The Kennecott site, mined for its copper in the early 1900s, is in the center of the park, approximately 5 miles from where the McCarthy Road ends at the Kennicott River. The National Park acquired-2,839 acres, including much of the historic mill town, the subsurface rights to the mine, and the surrounding natural area.

With this acquisition, the Park Service assumed new responsibility for protecting the important elements of the historical, cultural and natural landscape. In addition to being a historic site of national significance, the NHL also includes natural areas easily accessible to visitors and is a gateway to the park's backcountry. Its cultural landscape reflects a mixture of historic mining era buildings and artifacts intermixed with the ongoing life of an Alaska bush community, members of which own lands and businesses intermingled with NPS holdings at Kennecott and in the nearby area of the town of McCarthy.

Preserving such a site and providing visitor access to and interpretation of Kennecott requires analysis of the condition of the historic landscape and stabilizing selected important elements that are deteriorating, determining where visitor services should be located, and providing visitors with ways to explore the history of the site. It requires an understanding of the natural features and processes of the site, in order to both preserve historic values and provide appropriate protection of, access to and interpretation of its natural values for visitors. And it requires cooperation with residents and non -federal landowners, whose partnership is necessary for protection and public appreciation of the area. Existing Mill Site Unit covenants will be modified to more closely reflect the current and anticipated future land usage. There is provision within the covenants for modification of the restrictions by majority lot owner vote by September 2001.

Under private ownership, several important structures were stabilized through the efforts of the nonprofit group Friends of Kennicott. However, many health and safety problems remain on the site, artifacts continue to be lost, historic buildings continue to deteriorate, and many remaining artifacts are at risk. In addition, as part of the preliminary scoping for this plan with the community, there are many issues pending that which are beyond the scope of this effort which will require future planning efforts. Some of these issues include the proposed McCarthy Road upgrade, the impact of the new Princess Hotel in Copper Center on visitation, and identified utility and infrastructure needs of the larger community. This plan, along with the forthcoming associated cultural landscape report, will be an amendment to the park's General Management Plan. This interim operations plan will be for approximately a five year period, which represents how long it will take for the NPS to get basic operations underway. At the conclusion of this interim, start-up period, there will be an opportunity to re-evaluate the plan and make any needed adjustments.

Kennecott's designation as a NHL reflects its exceptional importance to the history of the United States - only 3% of properties listed on the National Register have the status of a NHL. Its significance as an early 20th century mining landscape is multi-dimensional, a fact represented in

the many themes of American history that can be discerned through the layers of its material culture. Among others, these themes include the evolution of mining technology at one of the richest copper ore sites in the United States, the physical development and evolution of a company mill town over four important decades of industrial growth, and the history of labor, family life, and environment on one of the last American frontiers.

The site's interpretive potential as a cultural landscape is compelling. As defined by the National Park Service, cultural landscapes are geographic areas, including cultural and natural resources, associated with a historic event, activity, or person. However, a landscape's age and associations do not auto-matically warrant preservation. As a cultural landscape, Kennecott's preservation is critical because its physical structures, characteristics, and features defining its historical significance remain. Individ-ual buildings and archeological features are important, but when considered within the holistic con-text of the cultural landscape, they are of an even greater value in communicating that significance. Because this landscape is largely intact, understanding Kennecott as a cultural landscape is a useful approach to preserving and interpreting its historical legacy.

Stewardship of the cultural landscape at Kennecott is addressed through the many aspects of this Interim Management Plan, which covers a wide range of topics including: cultural resources (including landscape features, land use, and design standards, archeological resources, museum collections and archives, buildings, and structures), natural resources (air quality, surface water, wetlands, vegetation, and wildlife), and interpretation. Integral to the Kennecott plan are management issues related to its administration and operations such as building leases, tours and seasonal use, land acquisition and easements, concerns related to utilities and infrastructure, and the paramount needs for safety and security.

The plan includes the following components:

Provides for both short-term and long-term NPS actions focused on compatible design, incremental change, and the reestablishment of the historic character of the site. Over the next five years the NPS would initiate rehabilitation of the company store for a visitor contact station, offices, and storage. Interpretive programs would be offered by the NPS, concessioners, and other cooperators. Exhibits would be developed in coordination with the McCarthy Museum. Structures would be stabilized on a priority basis. A number of buildings would be opened for visitors to tour independently. Historical pathways would be reestablished and some vegetation clearing would take place. The NPS would work cooperatively with the community to address the rehabilitation of the community building and fire and EMS response.

Preservation and Enhancement Plan

Management Concept

The primary NPS management goals of this Preservation and Enhancement plan (see figure____ in preceding Cultural Landscape Report) is to enhance visitor understanding of Kennecott by preserving, protecting and interpreting key remaining structures and landscape features, patterns and relationships that define the historic, cultural and natural character of the NHL.

The approach taken would reflect the 1997 Park Service report supporting federal ownership of the NHL, "Kennecott Acquisition Past, Present and Future". That report stated (page 25):

"What is (to be) maintained is the sense of ..., a site abandoned but still haunted by past residents, a place that has not been... sanitized. It is a place of discovery for the visitor, but one where investigation and inquiry can be done safely and with respect for the remaining historic objects and structures."

The plan incorporates key aspects of more than a decade of public discussion of acquisition and management of the NHL. One key result of the discussion was the desire for cooperative management of the NHL by the Park Service and local residents and nonprofit organizations.

More recently, the community and one such local nonprofit organization, the Friends of Kennicott, have endorsed a shared vision for the NHL. This shared vision will provide a strong foundation for the work that follows and a way to evaluate NPS plans and actions. Most interested parties within the community envision a future in which Kennecott:

- is stabilized to prevent deterioration of historic structures or artifacts and to make them available to the public.
- is managed with a "light touch" in which projects are undertaken in small steps, at modest costs, with minimal intervention process.
- is not just an abandoned mining town, but also is a place that reflects the vitality, creativity, and community spirit of today's residents.
- retains the slow pace, quiet, and spaciousness that foster contemplation and individual reflection.
- is part of a larger community in which residents act both individually and collectively to guide the future of the area.
- contributes to a strong, reasonably diverse economy that includes locally owned and operated businesses, community-based nonprofits, and traditions of barter and subsistence.
- protects and honors small-town values: safety, cooperation, self- sufficiency, and personal freedom.
- Is a place where tourism is allowed to evolve within the capacity of the community, rather than a place where external intervention and control accelerate growth.
- Is seen by local residents and visitors alike in its true context: a remote outpost of civilization in the midst of an enormous mountain wilderness.
- Is managed to protect the cultural and natural resources of this historic mining district and the surrounding glacial landscape; and provides a safe, educational, and rewarding experience for the area's visitors and residents.

The NPS supports the goals that the community and Friends of Kennicott have articulated above. The NPS will endeavor to implement this plan so that these goals are realized. While the NPS does not anticipate that these goals would conflict the NPS goals, policies and mandates, if such a conflict were to occur, NPS mandates would have to take precedence.

Major actions in this plan would include implementing a program of stabilization for historic structures; reestablishment of historic circulation routes; restoration of selected historic views and vistas through selective thinning of vegetation; preservation treatment of significant archeological features; and the addition of interpretive facilities, including trails, waysides, and a visitor contact station. This plan would also allow development within the historic landmark to the degree that proposed changes would be compatible with the historic character of the site. In this regard, individual actions, such as a change in land use or the addition of new structures within the historic district, would be considered and evaluated within the context of the cultural landscape as a whole.

Partnerships

The National Park Service considers itself a partner with the community. In consultation with local residents, landowners and organizations, the Park Service will establish procedures for early and regular discussion with the community of proposed Park activities at Kennecott. These discussions will occur at strategic times, such as prior to when the Park intends to submit budget proposals, before large scale projects are implemented, and on a periodic basis to clarify ongoing operations. It is understood that there may be some activities proposed where complete consensus may not be reached. While the NPS is committed to resolving such conflicts, there may be some instances where NPS mandates may take precedence over community concerns. In establishing these discussions, the Park Service acknowledges that:

- the success of the Kennecott NHL depends on the quality of relationships between NPS and its neighbors.
- there are a variety of vested interests in the area that are not necessarily organized into one official "representative" body, but all of whom will have the opportunities to participate in setting the course of action.
- conflicts should be resolved locally if possible.

The NPS will be receptive to participation in ongoing conversations with the community on issues of mutual concern. Specifically, the NPS considers itself a partner with the community in seeking funding to rehabilitate the community building for community functions and for visitor interpretive programs. The NPS would rent a private building as a temporary community center and park office space. Additionally, the NPS will foster community participation in a variety of ways, such as;

- establish a communication and conflict resolution process for implementing the NPS and community partnerships.
- establish a procedure for joint NPS/community review of proposed adaptive reuse of structures within the prescribed area..
- Consult with interested community members before implementing activities in administrative
 area, including selective thinning, routing of trails and boardwalks, development of
 interpretation and evaluation of techniques that may minimize flooding along National Creek.
- Coordinate with community members on certain infrastructure and utility rights-of-ways issues.

Additionally, the National Park Service, in consultation with the local community, will explore partnership proposals from nonprofit organizations that wish to share in the operation and management of Kennecott. Friends of Kennicott have expressed an interest in developing such a relationship. Accordingly, such a strategy will be evaluated. Additionally, the National Park Service will be developing a concessions plan for the NHL. It is hoped that this strategy will be integrated in the overall partnership strategy.

This plan is based on the evaluation of cultural landscape resources, NPS management guidelines and legal mandates, discussions with private landowners, and public meetings. The NPS would continue to work in partnership with the local residents to manage the area in a manner that protects natural and cultural resources and serves the long-term interests of the community by ensuring the protection of private property and access for all landowners.

The living aspects of day-to-day life in Kennecott, both summer and winter, are of significant interest to visitors. The NPS recognizes this and will seek means of satisfying this visitor interest in a way that does not adversely impact the private lives of the area residents.

The National Park Service recognizes that a viable and diverse community of families and individuals existed prior to the area being designated a national park, and will work with this local community to manage the landmark in such a way as to maintain the character of Kennecott and McCarthy.

Architectural Control Committee and Mill Site Subdivision Covenants

When the NPS purchased the 2,839 acres within the landmark boundaries, it became the largest landowner of the area, but not the majority landowner within the Mill Site Unit, which contains most of the original buildings and in-holder lots. Lots within this unit were originally conveyed with residential-type covenants and these covenants now require modification to more closely reflect current land uses and to meet the needs of the NPS as outlined within this document. Modifications of existing covenants will be initiated through an open and inclusive process of all Mill Site lot owners, determined by majority vote and implemented and enforced by the Unit's Architectural Control Committee (ACC). It is the NPS' intention to recruit other landowners to serve on the ACC, as part of this process.

Cultural Resources

Cultural Landscape

The National Park Service has a responsibility to abide by regulations governing the management of historic resources. It must comply with the legal and regulatory requirements as outlined in Director's Order- 28: Cultural Resource Management, the National Historic Preservation Act, and The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, among others. Those regulatory requirements address NPS policy, federal legal mandates, and acceptable standards for the treatment of the Kennecott historic

properties. The National Park Service will also abide by the covenants attached to the mill site town subdivision.

Land Use. This plan responds to historic land use patterns and uses (see Land Protection Plan, figure ____ in preceding Cultural Landscape Report) while providing for contemporary uses (within the historic context . Six land use "zones" would be delineated with the necessary covenant modification, providing for appropriate contemporary uses within the primary historic use areas that include the industrial core, administrative complex, housing areas, and service-related areas. The following chart outlines the six land use "zones," according to their contemporary and historic use. These zones will promote sensitive and appropriate development and will protect the historical nature of the Mill Site area.

TABLE I: LAND USE DESIGNATION

Zone	Name	Historic Lane Use	Appropriate Uses
I	Administrative Core	Office, manager's residence, depot, hospital, staff housing	NPS Operations, offices, interpretation, visitor center
2	Industrial Core	Concentration Mill, tram deck, power plant, leaching and flotation plant, machine shop, tailings, flume structures, warehouses	Interpretation, storage, equipment repair, workshop, utility infrastructure
3	Residential "A"	Silk stocking row: old lodge, barracks, local access roads	Interpretation, residential, lodging, tent cabins
4	Residential "B"	North end cottages	Private residences, interpretation
5	Residential "C"	Vegetated hillsides, cleared hillsides, historic dumps	Residential, undeveloped, natural resource protection
6	Commercial	Store, post office, storage, resident services, meat house, community facilities, housing, tent cabins	Concession/commercial (outfitters, bike rentals, guided tours, guest services, gift shop, bookstore), offices, community center

Design Standards. To guide development in the Kennecott NHL — especially in the mill town subdivision — the park would work with the community to establish design standards and guidelines for structures and landscape features consistent with the modified covenants. These guidelines would address the use of appropriate materials as well as the size, scale, massing, and

character of individual structures and landscape features. The architectural control committee has the responsibility for implementing these guidelines with the Mill Site Subdivision. The ACC will be composed of representatives from the NPS, other non-NPS Mill Site property owners.

Circulation and Access. Vehicular access would continue on all current routes. All abandoned vehicles would be removed from NPS properties. The park would work with the community to remove all other abandoned vehicles from properties within the NHL, particularly along the historic railroad bed. Primary and secondary pedestrian paths would be identified and reestablished within the NHL, particularly in the mill town subdivision. The primary pedestrian corridor would continue along the historic railroad bed and the existing road through the mill town. Existing service access roads will continue to be used.

Foot trails and pedestrian paths would serve a variety of functions, including interpretive, hiking, and local access for residents. All pedestrian routes that are adjacent to or pass through private property will be developed with consultation of the landowners.

An interpretive trail would be established on the west side of the mill town with views to the powerhouse, the machine shop, and the leaching plant. A footbridge across National Creek would be added to the trail to provide access to the company store. A pedestrian walking loop would be established which begins at the Company store and follows a historical road up National Creek to the footbridge and continues back down the creek to the Assay Office. With further evaluation, portions of this route may have limited vehicle access. Other pedestrian trails — including those to both Silk Stocking Row and Bonanza Mine, the historic carriage road to McCarthy, and paths behind the mill building — would be maintained. The primary pedestrian trail to Root Glacier would continue to be maintained north of the mill town.

Views and Vistas. In this proposal, historic views and vistas at Kennecott would be addressed. Selective thinning of vegetation on NPS properties would enhance historic viewsheds throughout the cultural landscape yet be consistent with maintaining the character of the abandoned mining town partially reclaimed by nature. The type and degree of clearing would be based on recommendations in the Kennecott Cultural Landscape Report. Selective thinning means removal of key trees to enhance a significant landscape feature and provide protection to the buildings and site from the effects of fire. Selective thinning would occur to mark the location of manager's residence, Birch residence, staff house annex, assay office north of National Creek, and areas adjacent to the mill. Selective thinning would also occur around the machine shop, power house, mill and leaching plant. If asked the NPS would assist landowners in planning selective thinning on their properties.

Archeological Resources

Features determined noncontributing to the historic district would be removed if they presented a safety hazard to visitors or residents. All other archeological resources, including historic dumps, would remain.

Museum Collections and Archives

The National Park Service would amend an existing scope of collections statement regarding the collection of artifacts and would follow regulations and NPS *Director's Order #28: Cultural Resource Management* to ensure the preservation and protection of artifacts.

Historically significant, site-related artifacts would be retained in their present locations unless they were at risk or contributed to interpretation. Artifacts determined to be noncontributing and incompatible to the historic district would be removed.

Historic documents, manuscripts, archival material, and associated papers within the scope of collections would be collected from NPS properties and placed in appropriate curatorial storage. Objects not requiring special environmental considerations will be curated in a NPS repository on site. NPS will provide technical assistance to the McCarthy Museum to assist the museum with caring and preserving its collection.

Structures

The National Park Service has a responsibility to abide by regulations governing the management of historic resources. It must comply with the legal and regulatory requirements as outlined in Director's Order- 28: *Cultural Resource Management*, the National Historic Preservation Act, and *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, among others. Those regulatory requirements address NPS policy, federal legal mandates, and acceptable standards for the treatment of the Kennecott historic properties.

Buildings. A structural stabilization program would be developed for NPS-Kennecott properties according to a three-tiered plan: items to be addressed immediately (high priority); items to be addressed in the third and fourth years; and long-term needs beyond four years, subject to funding.

Assessments would be made as needed to identify high priority needs such as those created by environmental conditions or because of unforeseen circumstances. The park would continue to work with local residents in ongoing stabilization or contracting efforts. The park would stabilize as appropriate, the upper and lower portions of the mill structure, the powerhouse, and the machine shop to make them safe for unescorted visitor access. The park would work with local interests to rehabilitate the historic community building for community activities and NPS programs. Structures that would be available for adaptive reuse would be the company store, the school, the west bunkhouse, and the meat locker. The company store would be rehabilitated to provide a safe structure for NPS operations, curatorial storage, and limited visitor activities. NPS would seek the involvement and participation of cooperators in the rehabilitation and reuse of the company store. Individuals and groups interested in adaptive reuse would be subject to an agreement with the NPS. Proposed uses would be limited to those of an educational nature. Adaptive reuse of buildings in addition to the store and community building are not as likely in the next five years other than for some minor administrative uses.

PRESERVATION GOAL: The goal of the National Park Service's Kennecott preservation program is to stop the deterioration of key historic buildings within the Kennecott NHL by repairing and replacing deteriorated roofs, walls and foundations while preserving the present abandoned character of the site. This goal will preserve future management options as well.

Specific tasks include:

- Mitigate all life safety issues in and around the structures
- Stop the imminent collapse and damage to the structures, which has resulted from years of abandonment
- Preserve and protect the historic landscape of the site and retain the industrial artifacts in place as part of the landscape character

- Reestablish a weathering skin by repairing roofs, walls and foundations using materials compatible with the historic period and consistent with the Secretary of Interior's Standards for Rehabilitation
- Repair deteriorated structural connections at floors, walls, and foundations and resolve vertical and lateral loads on the buildings resulting from winds and snow
- Mitigate water problems due to rain, site percolation and periodic flooding of National Creek.
- Establish a day labor crew
- Undertake a site cleanup to remove noncompatible building materials resulting from recent demolition and mining activities.
- Preserve and protect documents and artifacts remaining within the structures.
- Acquire additional parcels deemed critical to protecting the historic integrity of the site and management of the site. A prioritization process for determining the critical parcels will be developed. Parcels would be acquired on a willing seller basis only.

The tailings dumped against the building in the 1950s as part of a demolition effort would be removed.

Tram Towers. Mine cables would be lowered from the tram towers as funds become available or as hazardous conditions require. The structural condition of tram towers and cables would be evaluated on an annual basis. Selected tram towers above the timberline would be stabilized to reinforce a sense of scale and extent of the historic district.

Bridges. A low- water crossing at National Creek in front of the assay office would be established to allow vehicular access for residents and for NPS administrative needs. The historic railroad trestle across National Creek would be stabilized and rehabilitated to offer safe access for pedestrians, people in wheelchairs, and on ATVs and bicycles. The park would work to reestablish the historic tracks across the National Creek railroad trestle from the company store north to the mill structure as an interpretive component. Pedestrian bridges across National Creek (one east of the historic railroad trestle) would be reestablished in its historic location as part of the trail system. A new footbridge would be constructed west of the trestle.

Historic Boardwalks. To provide access to historic buildings, boardwalks would be rehabilitated or reconstructed based on historical documentation. Priority would be given to re-establishing walkways in areas around the company store, school, meat locker, bunkhouse(s), leaching plant, machine shop, powerhouse, and parts of the manager's house and historic administrative area.

Character- defining architectural features, such as the powerhouse smokestacks, the concentration mill ore chute, and the leaching plant/mill conveyor, would be stabilized and reconstructed as necessary.

Natural Resources

As part of a comprehensive resource management program, the National Park Service would initiate programs for ongoing monitoring of natural resources at periodic intervals. This would include a program to monitor water quality and quantity on National Creek, an assessment and monitoring of wildlife populations and sensitive plant species documented on Bonanza Ridge in 1967, and development of a bear management plan. In addition, the mill site would be monitored for the establishment of invasive non-native plant species.

Selective thinning of vegetation would occur on NPS properties to reestablish historic views and viewsheds and to protect the site from the effects of fire and damage to the buildings. The focus of the selective thinning would be in the historic administrative area, including the manager's residence, Birch residence, the staff house annex, the assay office area north of National Creek, and areas adjacent to the mill structure. The NPS will undertake a demonstration project in a small section of the administrative area to illustrate what is meant by selective thinning to help community members understand what a finished project in the area might look like. Encroaching vegetation around the historic community building, the company store, the machine shop, the powerhouse, and the leaching plant would also be thinned.

Vegetation around historic structures would be selectively thinned to mitigate potential damage to the buildings and to enhance the historic character of the mill town. Vegetation removal would be necessary for lead paint abatement, building stabilization, site regrading, and fire management. In all other instances, natural processes would be allowed to continue. The park would work with private property owners who wanted to conduct selective clearing on their properties in a manner consistent with historic district goals and objectives. The park supports the continued functioning of the community garden.

The NPS would explore channelization of National Creek as one alternative to protect cultural and natural resources from seasonal flooding through the historic administrative area and west of the historic railroad trestle. This would be consistent with historic channelization structures and methods, while acknowledging the post-mine re-establishment of natural stream processes. Other alternatives evaluated to protect historic resources include, moving structures and re-establishing the dam. The NPS realizes that none of the alternatives may be successful and flooding may continue to occur.

Parts of the NHL were not public land before the National Park Service acquired the property, and it was not open to subsistence uses. Hunting, berry picking, and gathering firewood would have only been permitted with permission of the previous landowners. As it is now public lands, subsistence activities would be permitted. However, if it appeared that such activities would interfere with NPS management of the property, the agency could seek to limit some subsistence uses.

Interpretation

The National Park Service would enter agreements with qualified local providers to conduct guided tours. For consistency and accuracy of interpretive content, yearly training would be provided by NPS. Interpretive programs at Kennecott would be expanded from existing levels, enabling visitors to learn about the mines and the mill town, the historic relationship of Kennecott to McCarthy, natural resources, and the contemporary community through a variety of media, interpretive techniques, and programs. The guided tours would be expanded to include a wider variety of tour subject matter and tour lengths.

Evening and special programs conducted by NPS personnel would continue. They would be conducted in various locations, including the historic company store and community building. The park also would offer seasonal interpretive tours through public areas. Consistent with the management philosophy a limited number of unobtrusive interpretive displays would be designed and installed in areas open to the public or where the public has a view into a structure such as in the leaching plant, powerhouse, the machine shop, and the concentration mill. In all cases, the park would work with commercial and nonprofit organizations, primarily locally based, using universal design principles to establish accurate and consistent interpretive information and

program content. A bookstore offering educational and informational material, interpretive books, posters, and similar products would be encouraged in the historic company store. Interpretive wayside displays would be established in the historic administrative area north of National Creek in association with the former Birch house and the buildings that were the manager's house, the staff house, and the manager's office.

The safety of potential tours to the mine sites and through the underground tunnels would be assessed, and the National Park Service would evaluate the possibility of offering one or more such tours in the future.

A short, captioned video production of the Kennecott story would be produced and displayed in the company store during visitor hours for a historical overview.

Interpretive wayside exhibits would be established in conjunction with selected circulation routes.

The development of interpretive exhibits, brochures, walking tours, and site-related information for Kennecott would be coordinated with the McCarthy museum so that they would be complementary and not competing. NPS would work with interested groups in the development of walking tour materials, brochures, and other interpretive media that would be available for their own use and for NPS use.

Accessibility

The Department of the Interior has administratively determined that it will follow the Americans with Disabilities Act Accessibility Guidelines, provided by the U.S. Architectural and Transportation Barriers Compliance Board, when such design guidelines are equal to or greater than those of the Uniform Federal Accessibility Standards. Since the Americans with Disabilities Act (ADA) was based on the requirements of section 504, ADA regulations and technical assistance materials, especially title I, provide additional in-depth resources for implementation of a reasonable accommo-dation process. The NPS would invite a panel of people with expertise in issues pertaining to handicap accessibility. The group will work with the NPS in developing a plan that provides long-term guidance on issues of programmatic and physical accessibility for the site.

Administration and Operations

Park Management

The park would pursue a short-term lease in a private building for onsite administrative office space and storage for interpretation and maintenance. These operations eventually would be relocated into the company store as funding became available for the necessary rehabilitation to bring the structure into regulatory compliance as an operations facility.

The National Park Service would enter if at all possible into multi-year agreements for others to conduct building tours, and to adaptively reuse some structures. All park-related management operations eventually would be located in the company store. Preference would be given to hiring local residents for concession agreements and for all rehabilitation and stabilization efforts undertaken and administered by the National Park Service.

The National Park Service would continue to evaluate opportunities to acquire additional properties and/or easements within the NHL as those opportunities arose. Acquisition would be limited to willing sellers on a priority basis. Priorities would be determined according to the land use designations outlined in this plan. (See Land Protection Plan map.)

Living space for the short-term and long-term seasonal, permanent and contractor employees would be managed in a variety of ways. Living space in the historic west bunkhouse would be made available for some employees as the rehabilitation of that structure was completed. Other structures that the NPS acquired would be evaluated as potential living quarters. Temporary cabins would be placed on NPS property that would be utilized for living space. Offsite housing would be sought as well. Additionally, some NPS employees and contractors' employees would find their own housing at market rates.

Work on historic buildings would be done between May and October of each year. Restroom, shower and laundry facilities would be required for work crews.

NPS Utilities and Infrastructure

Administrative and maintenance storage would be accommodated in the lower level of the company store. This would include the storage of minor equipment and materials. Hazardous materials, vehicles, fuel, garbage, and large materials would be stored at remote locations, including the McCarthy airstrip.

Vault toilets would be provided for visitor use along the main road through the site. The toilets would be installed in compliance with applicable Alaska Department of Environmental Compliance (ADEC) regulations. Toilets would be pumped every fall by contract and the sewage hauled to Glennallen. The park would seek long-term strategies for developing a septic system on NPS property or, if feasible, tying into a community sewer system to provide service to NPS facilities south of National Creek.

Bearproof trash containers would be placed at strategic locations along the main road. Trash would be hauled across the pedestrian bridge at McCarthy as needed and taken to a park-owned solid waste transfer facility at the end of McCarthy Road. A planned transfer facility would feature an incinerator, recycling bins, and dumpsters. Wastes associated with stabilization (lumber, packaging, and construction materials) would be hauled by a contractor from the transfer site to an approved landfill. Lumber coated with lead paint would be stockpiled and annually hauled across the river for incineration at the transfer site.

Generators and solar photovoltaic equipment would supply power for NPS structures when appropriate and feasible. In conjunction with community entities, the park would pursue long - term power supply strategies. Photovoltaic power, hydroelectric generation from National Creek, or a centralized community generator would be considered among other possibilities. Consideration will be given to technologies that are compatible and consistent with the cultural and natural environment of the abandoned Mill Site Area. Any potential threats to water resources from the construction and use of this type of facility would be addressed in a separate document.

No water would be supplied for visitors until the company store building was rehabilitated. Efforts would be made to arrange for a long-term water supply for visitors and for NPS operational use. This might be achieved by drilling a well or developing a surface water collection and treatment system on National Creek. The system installed would be to ADEC standards and preclude any conflict with other landowners.

Fuel for portable generators and all-terrain vehicles (ATVs) would be hauled in small quantities across the footbridge corresponding to immediate needs. As fuel requirements increase, aboveground bulk storage tanks would be located on NPS-leased property at the McCarthy airstrip. A contractor would deliver diesel fuel by air or ground transportation to a bulk tank. Fuel would be transferred from the bulk tank to Kennecott in a pickup-mounted tank.

Safety and Security

Hazardous materials and debris that could present safety concerns would be removed from NPS properties. This would include items like boards with exposed nails, shards of metal, cable fragments, miscellaneous tools or machinery, and other potentially dangerous articles.

NPS would initiate a program to limit and control access to buildings. Signs restricting or prohibiting access into NPS properties would be placed in appropriate locations. Broken doors and locks would be repaired and replaced as appropriate. Windows would be replaced, and mechanisms to prevent unauthorized and unsafe access would be used such as shutters, wire mesh, or other appropriate devices. Identified visitor access routes into and around buildings would be improved to remove all immediate dangers, and signs would be located appropriately to indicate safe routes.

According to the National Fire Protection Association, the single largest cause of fire in historic buildings is arson. The NPS would undertake a fire assessment and implement a fire prevention program. Fire extinguishers would be placed in all NPS-owned properties. Fire escape routes would be identified for all NPS-owned buildings, and battery lights would be available for emergencies. A local year-round caretaker would be hired to provide site security.

The park would work with the community to improve community firefighting capabilities, including participating in a volunteer fire department for the mill town and the ability to temporarily dam National Creek and pump water for fire suppression. A portable pump and hose would be on hand to draw water from National Creek for firefighting. There are existing water rights, and future requests to withdraw surface water would be analyzed individually.

In the long term, a system would be established to detect fire and security risks on all NPS-owned structures. As a water supply was developed, sprinkler systems would be installed in the visitor center and other occupied NPS buildings south of National Creek. The park would initiate hazardous-fuel reduction measures around NPS-owned properties to reduce the fire hazard from adjacent landscape elements and would work with the community to reduce fire hazards on private properties.

The park would continue to work with the community to develop a strategy for community-wide emergency medical services. Law enforcement would continue to be addressed individually through various jurisdictional entities including the NPS, where appropriate.

Hazards

As part of the acquisition of the Kennecott properties by the National Park Service, a number of stipulations pertaining to hazardous wastes and lead paint were established. The National Park Service has entered agreements with the Alaska Department of Environmental Compliance, the

U.S. Environmental Protection Agency, and the Justice Department. Under those agreements, the National Park Service affirmed its obligation pertaining to the abatement of lead paint hazards in accordance with state and OSHA regulations pertaining to worker safety and training. Asbestos will be removed from Jumbo Mine; Erie Mine would be closed to access due to asbestos; and monitoring will be conducted in the dumpsites at the mill town. The historic dumps do not pose an unacceptable risk, but the groundwater will be monitored for hazardous substances.

Budget (Figure Next Page)

The table below describes both projects that are ongoing and those that are anticipated within the next five years. There is no guarantee that projects on the requested list will be funded. The full scope of work and the budgetary requirements are presently being developed for a longer stabilization effort. As the NPS begins to work at the site, questions and operational procedures pertaining to logistics, production and capabilities of the local work crews, potential contracting options and technical difficulties are becoming more clearly defined. Accordingly, funding requirements in subsequent years will be clearer completion of major upgrades to the existing Chitina to McCarthy gravel road is not expected within the next five years. While levels of visitation may increase with improved maintenance of the road, high annual increases are not expected. However, when the McCarthy Road is upgraded a re-evaluation of visitor impacts will be needed.

The recently upgraded McCarthy airstrip has the potential for handling a greater number of visitors to the area. The new Princess Hotel slated for opening in Copper Center in 2002 may yield increased visitation by this means. However, it is not known at this time how many visitors this may entail.

Promotion of the area needs to be moderated by the desire of the NPS and the community to offer visitors a quality experience, and to minimize impacts on the surrounding community and natural areas.

Anticipated Visitation -

From McCarthy Road /Chitina Roundtable Project, April 2000 and State of Alaska Department of Transportation and Public Facilities . Statistics are from the low growth scenario of .75%

Visitation toKennecott District 2000- 2020 Source: State of Alaska, McCarthy Road/Chitina Roundtable Project, April 2000					
Year	Visitor Arriving by Road	Visitors Arriving by Air			
2000	8012	470			
2005	8704	822			
2010	9527	1174			
2015	11098	1526			
2020	11864	1878			

COMPLETED OR ONGOING PROJECTS	Costs (\$)	
STRUCTURAL STABILIZATION		
Stabilize Ore Chute, Repair Mill Bldg., Regrade Creek area	225K	
Correct Unsafe Bldg Deficiencies	55.7K	
Stabilization of Kennecott Machine Shop & RR Depot	180K	
Lead Paint Mitigation	1.5M	
Stabilize Recreation Hall	150K	
RESEARCH & DOCUMENTATION		
Collection Management Plan for Machine Shop	47.5K	
Implementation of Kennecott Cultural Landscape Report	30.4K	
Produce Kennecott Kids Oral History	юК	
ENVIRONMENTAL		
Mine Openings Survey, Design and Safing	25K	
FUTURE REQUESTS	Costs (\$)	
STRUCTURAL STABILIZATION	I	
Stabilization of Assay Bldg.	6oK	
Stabilization of Mill Bldg	140K	
Stabilization of Manager's Office & Store	130K	
Stabilization of Tram Turnhouse, Tailings Hoist House & Refrigeration Plant	120K	
Stabilization of West Bunkhouse & Power Plant	120K	
Stabilization of Kennecott Leaching Plant	140K	
Rehabilitate Kennecott Store for Visitor Contact Station	700K	
RESEARCH & DOCUMENTATION		
Historic Resource Study	150K	
Kennecott NHL on CD- ROM	100К	

Appendix B

ANILCA Section 810(a) Summary Evaluation and Finding

ANILCA SECTION 810(a) SUMMARY EVALUATION AND FINDINGS

I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluation of potential restrictions to subsistence activities that could result from the National Park Service (NPS) developing a temporary park operations support complex in the Kennecott District of Wrangell-St. Elias National Park and Preserve (WRST) near Mile 60 McCarthy Road. This project is envisioned as a field season support camp for NPS employees temporarily stationed at the Kennecott Mines National Historic Landmark and employees of NPS contractors. A gravel road would be constructed to connect the complex to the McCarthy Road.

II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands ... the head of the federal agency ... over such lands ... shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency —

- (1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;
 - (2) gives notice of, and holds, a hearing in the vicinity of the area involved; and
- (3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the national park system in Alaska. Wrangell-St. Elias National Park, containing approximately eight million one hundred and forty-seven thousand acres of public lands, and Wrangell-St. Elias National Preserve containing approximately four million one hundred and seventeen thousand acres of public lands, were created by ANILCA, section 201(9), for the following purposes:

"To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; and to provide continued opportunities including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of Title VIII."

The potential for significant restriction must be evaluated for the proposed action's effect upon "...subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use."

III. PROPOSED ACTION ON FEDERAL LANDS

The National Park Service is considering two alternatives for addressing seasonal housing, materials storage, and other operational support functions for the newly established Kennecott District in Wrangell-St. Elias National Park and Preserve. A full discussion of the alternatives and their anticipated effects is presented in the EA. The alternatives are summarized briefly below.

Alternative 1 (no action alternative): The National Park Service would not develop the Kennecott District temporary park operations support complex with access at Mile 60 McCarthy Road. The practice of storing materials in existing access rights-of-way would continue. The NPS would also lease housing and material storage sites on the open market to the extent that they are available. No new land surface disturbance or habitat loss would occur at the site.

Alternative 2 (preferred alternative): The National Park Service would develop the Kennecott District Park Operations Support Complex on a 6-acre site situated 600 feet south of the McCarthy Road with access at Mile 60. This project would serve as a field season support camp for NPS employees temporarily stationed at the Kennecott Mines National Historic Landmark and employees of NPS contractors. Proposed development would include portable housing structures, a material staging and storage yard, and utilities including drinking water, septic, and telecommunications. The project would result in the direct loss of 3.75 acres of wildlife habitat, as explained below.

IV. AFFECTED ENVIRONMENT

A summary of the affected environment pertinent to subsistence use is presented here. The following documents contain additional descriptions of subsistence uses within Wrangell-St. Elias National Park and Preserve:

General Management Plan/Land Protection Plan, Wrangell-St. Elias National Park and Preserve, NPS Alaska Region, 1986.

Final Environmental Impact Statement, Wilderness Recommendation, NPS Alaska Region, 1988.

Wrangell-St. Elias Subsistence Management Plan, NPS Alaska Region, 1998.

Subsistence uses are allowed within Wrangell-St. Elias National Park and Preserve in accordance with Titles II and VIII of ANILCA. The national preserve is open to federal subsistence uses and state authorized general (sport) hunting, trapping and fishing activities. Qualified local rural residents who live in one of the park's twenty-three designated resident zone communities or have a special subsistence use permit issued by the park superintendent may engage in subsistence activities within the national park. State-regulated sport fishing is also allowed in the national park. The proposed action falls within the preserve.

The landscape included within Wrangell-St. Elias National Park and Preserve ranges from forests and tundra to the rock and ice of high mountains. The region's main subsistence resources are salmon, moose, caribou, Dall sheep, mountain goat, ptarmigan, grouse, snowshoe hare, furbearing animals, berries, mushrooms, and dead and green logs for construction and firewood.

The site of the proposed support complex is currently a mix of balsam popular woodland and open white spruce forest. The dominate plant species in the poplar woodland are poplar, soapberry, and dryas. Dominant species in the spruce forest are white spruce and soapberry. Local rural residents, especially from the McCarthy area, use wildlife and berries in the region for subsistence purposes. Moose, black bear, snowshoe hare, spruce grouse, and blueberry are harvested for subsistence locally.

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerable from previous years due to weather conditions, migration patterns, and natural population cycles.

V. SUBSISTENCE USES AND NEEDS EVALUATION

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted.

The evaluation criteria are:

- 1. the potential to reduce important subsistence fish and wildlife populations by (a) reductions in numbers; (b) redistribution of subsistence resources; or (c) habitat losses;
- 2. what affect the action might have on subsistence fisher or hunter access;
- 3. the potential for the action to increase fisher or hunter competition for subsistence resources.

The potential to reduce populations:

Subsistence species and habitats would be subjected to some potential impacts and disturbances as a result of the proposed development of the operations support complex. The proposed action alternative would directly affect 2.4 acres of land cover and wildlife habitat for species used by local rural residents for subsistence purposes (e.g. moose, black bears, snowshoe hares, and spruce

grouse); however such wildlife habitat is generally widespread in the local area. Changing vegetation structure may result in limited localized changes in animal community composition. Specifically, species inhabiting more open habitats will replace cover-dependent species. Additionally, the proposed action would increase the presence of humans at the site, which could affect wildlife distribution patterns. No fish populations exist at the site as there are no streams or surface waters providing fish habitat. While some berry-bearing bushes would be eliminated, the predominant species is not used for subsistence purposes (soapberry), and those berry varieties that are used for subsistence purposes are relatively sparse on the proposed complex site but very common throughout the larger vicinity.

Any activity involving construction, including vegetation removal or site preparation, will entail some short-term and spatially limited disturbance to wildlife species inhabiting the site such as birds, red squirrels, snowshoe hares, mice and voles. Mobile species would avoid the area during actual construction activity. In addition it is possible that some bird nesting might be prevented or interrupted. Given the very low nesting densities in these habitats the probability of nest disturbance or destruction is low, and would likely affect the most common nesting species (e.g. robins, juncos). These are not subsistence species. Consequently, the proposed alternatives are not expected to significantly alter wildlife movements or reduce populations of important subsistence resources. The amount of potential habitat reduction is limited when compared to the overall size of the park.

Beyond this, NPS regulations and provisions of ANILCA provide the tools for adequate protection of fish and wildlife populations on federal public lands while ensuring a subsistence priority for local rural residents. NPS regulations allow the superintendent to enact closures, restrictions, or both if necessary to protect subsistence opportunities and ensure the continued viability of particular fish or wildlife populations.

The effect on subsistence access:

Access rights for subsistence use on NPS lands are granted by section 811 of ANILCA. The park and preserve are managed according to legislative mandates, NPS policies, and guidelines in the approved 1986 General Management Plan for Wrangell-St. Elias. No action under the alternatives, which are described in detail in the EA, should affect the access of subsistence users to natural resources within the park and preserve beyond the loss of habitat mentioned above.

The potential to increase competition:

Competition for wildlife or other resources is not expected to significantly impact subsistence users as a result of the proposed actions. National Park Service regulations and ANILCA provisions mandate that if and when it is necessary to restrict taking of fish, subsistence users are the priority consumptive users on federal public lands and would be given preference over other consumptive uses (ANILCA, section 802(2)). Continued implementation of the ANILCA provisions should mitigate any increased competition from resource users other than subsistence users. Therefore, the proposed action is not expected to adversely affect resource competition.

VI. AVAILABILITY OF OTHER LANDS

The EA describes other lands that were considered for the proposed action; however, these alternative sites were rejected on the basis of site selection criteria. Additionally, locating the proposed support complex on these other lands would have resulted in similar impacts to subsistence resources.

VII. ALTERNATIVES CONSIDERED

The EA and this evaluation have described and analyzed the proposed alternatives. The proposed actions are consistent with NPS mandates and the General Management Plan for the park and preserve. No other alternatives that would reduce or eliminate the use of public lands needed for subsistence purposes were identified. It is possible for subsistence users to utilize other lands inside and outside the park and preserve; subsistence users extend their activities to other areas as necessary.

VII. FINDINGS

This analysis concludes that the proposed action will not result in a significant restriction of subsistence uses.

Appendix C

Assessment of Actions Having an Effect on Cultural Resources for Interim Park Operations Support Complex

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES

A. DESCRIPTION OF UNDERTAKING

1. **Park:** Wrangell-St. Elias National Park & Preserve Park district (optional) Kennecott

2. Work/Project Description:

a. Project name Kennicott River Admin Site date 02/18/03 Park project #(s) WRST-228-

K

b. Describe project and area of potential effects (as defined in 36 CFR Part 800.2(c)); explain why work/project is needed.

WRST plans to construct an operational support facility near McCarthy in order to better accommodate park needs, including its ongoing efforts to restore, operate, and interpret the nearby Kennecott Mill Town. The proposed complex, which will be situated approximately 600 feet south of the McCarthy Road at mile 60 (see attached map) and encompass approximately 5.5 acres, will contain housing, material staging, and a communications satellite link. Ultimately, the complex will include (7) 2-3 bedroom cabins, (8) 1-2 bedroom cabins, and (12) single room cabins w/ 2 support buildings; (3) RV pads w/ hook-ups; a generator with fuel tank; a water well and tank; a leach field; a 30,000 sq. ft. storage area; and approximately 2500 feet of new gravel roads. For a more detailed description of the project, see the attached Environmental Assessment.

The Alaska Office of History and Archaeology conducted archeological surveys along the McCarthy Road in conjunction with road planning efforts in 1992, identifying both significant and insignificant historic resources. Most were associated with the Copper River and Northwestern Railway, and included railroad structures and artifact scatters. WRST staff surveyed the proposed administrative site in August and October 2002 and no archeological resources were recorded (see attached report).

The National Park Service has identified the area of potential effect, as defined at 36 CFR § 800.2(c), to be restricted to the 5.5 acre site.

3. Has the area of potential effects been surveyed to identify cultural resources?

No.

 \boldsymbol{X} Yes. Source or Reference $\,$ Tim Marshall, "Archeological Inventory Report Form, Kennecott

River Administrative Project," 2002.

X Check here if no known cultural resources will be affected. (If this is because area has been

disturbed, please explain or attach additional information to show the disturbance was extensive as to preclude intact cultural deposits.) SO **Potentially Affected Resource(s):** 4. Name and number(s): none location: NR status: Name and number(s): location: NR status: (REPEAT FOR EACH AFFECTED RESOURCE) 5. The proposed action will: (Check as many as apply.) Destroy, remove, or alter features/elements from a historic structure Replace historic features/elements in kind Add nonhistoric features/elements to a historic structure Alter or remove features/elements of a historic setting or environment (inc. terrain) Add nonhistoric features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape Disturb, destroy, or make archeological resources inaccessible, Disturb, destroy, or make ethnographic resources inaccessible X Potentially affect presently unidentified cultural resources Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources Involve a real property transaction (exchange, sale, or lease of land or structures) Other (please specify) 6. Measures to prevent or minimize loss or impairment of historic/prehistoric properties (Remember that setting, location, and use may be relevant): 1) All archeological and historical documentation will be conducted by or under the direct supervision of a person meeting the Professional Qualifications Standards listed under the Secretary of the Interior's Standards and Guidelines (48 CFR 44716-42, September 29, 1983). 2) WRST's staff archeologist will survey the proposed site prior to construction and will closely monitor any ground-disturbing activities. 3) If construction crews encounter previously unidentified archeological features they will cease work, ensure protection of the feature, and notify the park superintendent (36 CFR 9.10(e)(2)). 7. Supporting Study Data: (attach if feasible; if action is in a plan, EA or EIS, give name and project or page number): WRST, "Environmental Assessment. Kennicott River Administrative Site" **Attachments:** [X] Maps [X] Archeological survey, if applicable [] Drawings [] 8. **Specifications** [] Photographs [] Scope of Work [X] Site plan [] List of Materials [] Samples

Prepared by Geoffrey Bleakley Title Historian 822-7406

[]Other

Date 02/18/03 Telephone (907)

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

Check if project does not involve ground disturbance []

No Effect

Recommendations for conditions or stipulations:

Assessment of Effect: X No Effect

The park 106 coordinator requested review by the park's cultural resource specialist/advisers as indicated by check-off boxes or described below:

SPECIALISTS: Your comments here (or attached) show that you have reviewed this proposal for conformity with requirements of Section 106, with the 1995 Servicewide PA (if applicable), and applicable parts of the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, NPS Management Policies, and NPS-28, and have given your best professional advice about this project and the issues relevant to the Section 106 process, including identification and evaluation of historic properties and further consultation needs.

[X] ARCHEOLOGIST

Programmatic Exclusion

Assessment of Effect:

Programmatic Exclusion

Name: Tim Marshall Date: 12/05/02

Comments: Although a thorough survey of the area encountered no cultural resources, some undiscovered ones may still exist; those obscured by thick vegetation or underground. The terrain does not appear to have been modified/impacted by historic cultural activities. Monitoring of all ground-disturbance activities will ensure that any unknown cultural resources will be protected.

Recommendations for conditions or stipulations: As stipulated in Section A-6, an archaeologist must

No Adverse Effect

No Adverse Effect

Adverse Effect

Adverse Effect

monitor all ground disturbance activities.

[] CURATOR
Name:
Date:
Comments:

Assessment of Effect: No Effect No Adverse Effect Adverse Effect Programmatic Exclusion
Recommendations for conditions or stipulations:

[] ETHNOGRAPHER
Name:
Date:
Comments:

[X] HISTORIAN

Name: Geoffrey Bleakley

Date: 02/18/03

Comments: Archaeological survey completed. No known historic properties within area of potential

effect.

Assessment of Effect: X No Effect

No Adverse Effect

Adverse Effect

Programmatic Exclusion

Recommendations for conditions or stipulations: WRST must ensure that all archeological and historical documentation is carried out by or under the direct supervision of a person or persons meeting at a minimum the Professional Qualifications Standards listed under the Secretary of the Interior's Standards and Guidelines (48 CFR 44716-42, September 29, 1983). WRST's staff archeologist must survey the proposed site prior to clearing and construction and closely monitor all ground-disturbing activities. If construction crews encounter previously unidentified archeological features they must cease work, ensure protection of the feature, and notify the park superintendent (36 CFR 9.10(e)(2).

] HIS	STOR	ICAL	AR	CHI	FECT:
] HIS	HISTOR	HISTORICAL	HISTORICAL AR] HISTORICAL ARCHIT

Name:

Date:

Comments:

Assessment of Effect: No Effect No Adverse Effect Adverse Effect

Programmatic Exclusion

Check if project meets Secretary's Standards []

Recommendations for conditions or stipulations:

[] HISTORICAL LANDSCAPE ARCHITECT

Name:

Date:

Comments:

Assessment of Effect: No Effect No Adverse Effect Adverse Effect

Programmatic Exclusion

Check if project meets Secretary's Standards []

Recommendations for conditions or stipulations:

C. **PARK 106 COORDINATOR REVIEW AND RECOMMENDATIONS** (completed by the park Section 106 coordinator)

1. Assessment of Effect:

X No Effect No Adverse Effect Adverse Effect

2.	Compliance requirements: (The following is the park's assessment of Section 106 process needs and requirements for this undertaking.):
[]	A. STANDARD 36 CFR PART 800 CONSULTATION Further consultation under 36 CFR Part 800 is needed.
[]	B. PROGRAMMATIC EXCLUSION UNDER THE 1995 SERVICEWIDE PROGRAMMATIC AGREEMENT (PA) The above action meets all conditions for a programmatic exclusion under Stipulation IV of the 1995 Servicewide PA for Section 106 compliance. APPLICABLE EXCLUSION: Exclusion IV.B [Specify 1-13 or IV.C addition to the list of exclusions.]
[X]	C. PLAN-RELATED UNDERTAKING Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 1995 Servicewide PA and 36 CFR Part 800. Specify plan/EA/EIS: WRST, "Environmental Assessment: Kennicott River Administrative Site"
[]	D. UNDERTAKING RELATED TO ANOTHER AGREEMENT The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR Part 800.7 or counterpart regulations. Specify:
[X]	E. STIPULATIONS/CONDITIONS Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR Part 800 criteria of effect or to avoid or reduce potential adverse effects.
person	archeological and historical documentation will be conducted by or under the direct supervision of a meeting the Professional Qualifications Standards listed under the Secretary of the Interior's Standards idelines (48 CFR 44716-42, September 29, 1983).
	ST's staff archeologist will survey the proposed site prior to construction and will closely monitor any disturbing activities.
	instruction crew encounter previously unidentified archeological features they will cease work, ensure on of the feature, and notify the park superintendent $(36\ CFR\ 9.10(e)(2))$.
Recom	nmended by Park Section 106 coordinator: Name
	Title Historian Date

D. SUPERINTENDENT'S APPROVAL

The proposed work conforms to NPS Management Policies and NPS-28 and I have reviewed and approve the recommendations, stipulations or conditions noted in Section C of this form.
Name/Signature of Superintendent Date

Appendix D

Archaeological Inventory Report Form for Interim Park Operations Support Complex

WRST-228-K

XXX No. -02-WRST Archeological Survey No.

ARCHEOLOGICAL INVENTORY REPORT FORM

- 1. PROJECT: Kennecott River Administrative Project, WRST-228-K
- 2. PACKAGE NO.: NA
- 3. PROJECT DESCRIPTION: The project consists of a pedestrian survey of 8.8 acres of land for a proposed administrative support site for the NPS Kennecott Mill Complex.
- 4. PROJECT LOCATION: T.5S, R.13E, Sec 13, SW ¼ SW ¼, Section 24 NW¼ NW ¼ NW ¼, Section 23 NE ¼ NE ¼ NE ¼, Section 18 SE ¼. Copper River Meridian.
- 5. SURVEY AREA BOUNDARIES: Survey boundaries are based on the proposed facility map and an area detailed by the WRST maintenance staff.
- 6. DATE (S) OF SURVEY: 8-27-02 and 10-22-02.
- 7. SURVEYORS: T. Marshall
- 8. NUMBER OF PERSON-DAYS IN SURVEY: 8 hours
- 9. DESCRIPTION OF AREA SURVEYED: The survey area is 8.8 acres in size, found in two locations in close proximity. The area has moderate terrain relief and contains a variety of vegetative cover and density (photo 1). Several minor erosion channels are located within the survey area, generally running from north to south. Ground cover consists of numerous trees (mainly spruce), various bushes, grasses, shrubs and forbs. Vegetation ground cover ranges from 70 to 95%, with an average of approximately 90%. In areas where the ground cover is less obscuring glacial moraine is visible. Elevation of the survey area is 1400 feet above sea level.

Several roads are adjacent to the project area: the McCarthy road is on the northern edge of the project area, a combination road/aircraft landing strip is on the east edge of the survey area, and a third road is on the south edge of the survey area (see attachment 2). An infrequently used two-track runs through the eastern portion of the project area. Several buildings are located to the northeast of the project area, besides the landing strip.

10. PREVIOUS INVESTIGATIONS: In 1992 the Alaska Office of History and Archaeology conducted archeological surveys along the McCarthy Road in conjunction with road planning efforts. Both significant and insignificant historic resources were identified. Most were associated with the Copper River and Northwestern Railway, and include trestles, railway remains, remnants of old homesteads, and artifact scatters.¹ The survey would have included the northern border of the survey area; no remains were found within the project area.

- 11. SURVEY PROCEDURE: The survey consisted of a series of parallel pedestrian transects every 20 meters, running north/south. Due to the often-thick vegetation ground cover, areas with exposed ground surface were given increased examination.
- 11. DESCRIPTION OF CULTURAL RESOURCES LOCATED: A partially flattened rusty metal can, possibly historic, was encountered along the eastern edge of the survey area. The can is a sanitary type with double seamed side and top closures. The can was in very close proximity to the runway/road. Modern trash was also found in parts of the survey area.

A campfire ring, composed of locally available moraine was discovered adjacent to the two-track road within the survey area. This ring appears to be of recent manufacture; an aerial photo used by the WRST maintenance staff to illustrate the survey area has a mobile home parked adjacent to location of the ring.

12. EVALUATION OF CULTURAL RESOURCES LOCATED: The tin can is likely historic in nature, based on the type of can and level of metal degradation which are similar to cans found at nearby dumps within the historic Kennecott Mill complex (see photo 2).



Photo 1. Project area, looking southeast.



Photo 2. Tin can found within survey area.

The can does not appear to be part of a dumpsite; there are no signs of buried archaeological deposits within the project area. It is probable that the can is an isolated artifact and does not indicate extensive historic usage of the area.

13. NATIONAL REGISTER STATUS: NA

14. EFFECT OF THE PROJECT ON RESOURCES: The survey very revealed limited archaeological resources whose limited research potential has been exhausted during recordation. However, the thickness of the ground cover does not preclude the possibility of subsurface deposits.

15. RECOMMENDATIONS: A conditional clearance is recommended. Conditions of the clearance are stated as follows:

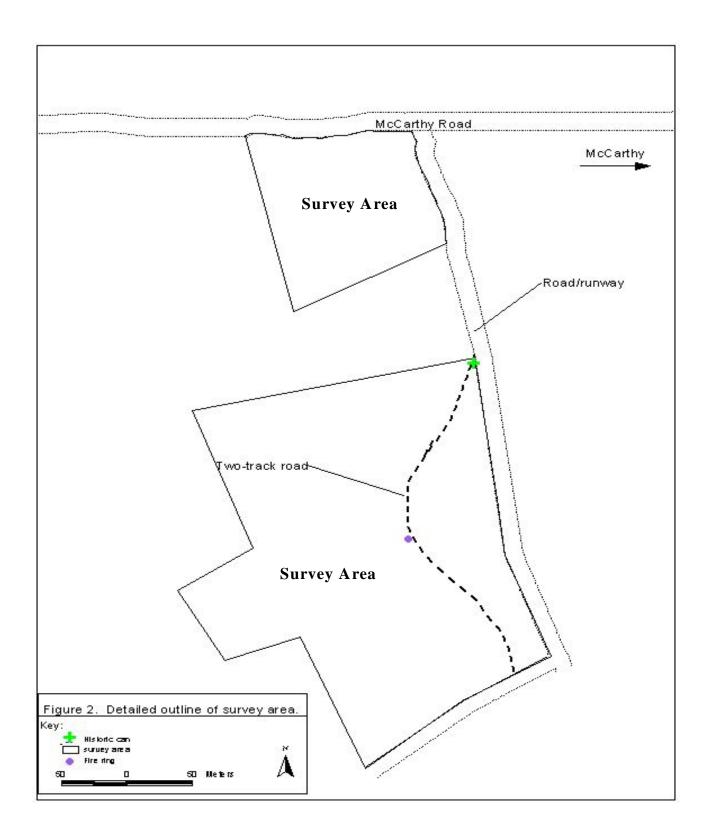
The thickess of vegetation throughout a large portion of the project leaves the possibility that buried archaeological resources may yet be present within the project area. It is recommended that an archaeologist be present whenever gorund disturbance activities are initiated. If any archaeological resources are encountered during the installation process, all necessary steps will be taken to protect them and the Superintendent of the park will be notified.

16. ATTACHMENTS:

Attachment 1. USGS 1:63,360 B-6, showing project location.

Attachment 2. Detailed map of project area.

17. NATIVE AMERICAN CONSULTATION: NA



(Footnotes)

¹ 2002 Bleakley, G. "ASSESSMENT OF ACTIONS HAVING AN EFFECT ON CULTURAL RESOURCES", 1.